

(19)



JAPANESE PATENT OFFICE

**PATENT ABSTRACTS OF JAPAN**

(11) Publication number: **01138095 A**

(43) Date of publication of application: **30.05.1989**

(51) Int. Cl **B23K 35/30**

**B23K 35/32, B23K 35/40, C22C 19/07**

(21) Application number: **62297940**

(22) Date of filing: **26.11.1987**

(71) Applicant: **SUMITOMO METAL IND LTD**

(72) Inventor: **OHASHI YOSHIHISA**

**(54) WIRE ROD OF SMALL DIAMETER HAVING  
SUPERIOR BENDABILITY**

**(57) Abstract:**

**PURPOSE:** To provide superior bendability to a wire rod and to enable the coiling of the wire rod and high-speed continuous automatic welding for hard facing by specifying the average grain size of a solid soln. of Co and the volume percentage of a liq. phase part having a specified void volume.

**CONSTITUTION:** Powder of a Co alloy such as 'Stellite(R)' or 'Tribaloy(R)' is compacted and sintered to obtain a wire rod. In this wire rod, a part of a solid soln. of Co having  $\leq 45\mu\text{m}$  average grain size is enclosed by a liq. phase part contg. precipitated carbides of Cr, Mo, W, etc. The amt. of the liq. phase part is  $\leq 10\text{vol.}\%$  and the part has  $\leq 10\%$  void volume. By this structure, the wire rod has satisfactory bendability.

**COPYRIGHT:** (C)1989,JPO&Japio